

ABSTRACT

Ground contact portions 10 are categorized in a tree structure manner such that all of the ground contact portions 10 of a mobile body 1 (mobile robot) equipped with three or more ground contact portions 10 become leaf nodes and that an intermediate node exists between the leaf nodes and a root node having all the leaf nodes as its descendant nodes. On each node (a C-th node) having child nodes, the correction amounts of the desired relative heights of the ground contact portions 10 of the C-th node are determined such that at least the difference between an actual posture inclination and a desired posture inclination of a predetermined portion, such as a base body 36, (posture inclination difference) is approximated to zero, and joints of the mobile body 1 are operated so that a desired relative height obtained by combining the correction amounts is satisfied.